

WHAT IS CLAIMED IS:

1. A method of forming a coating comprising:
 - providing a substrate having a metal layer;
 - applying an antireflective layer to said substrate layer;
 - applying an insulator layer to said antireflective layer; and
 - applying a lubrication layer to said insulator layer.
2. The method of Claim 1, said applying an insulator comprising:
 - applying an oxide layer over said antireflective layer.
3. The method of Claim 1, said applying an insulator comprising:
 - applying an oxide layer over said antireflective layer using plasma deposition.
4. The method of Claim 1, said providing comprising:
 - providing a partially fabricated micromechanical device.
5. The method of Claim 1, said providing comprising:
 - providing a partially fabricated micromechanical device having an electrode.
6. The method of Claim 1, said providing comprising:
 - providing a partially fabricated micromechanical device having an aluminum alloy electrode.
7. The method of Claim 1, said providing comprising:
 - providing a partially fabricated micromirror device comprising an aluminum alloy landing electrode supported by a semiconductor substrate.
8. The method of Claim 7, said applying an antireflective coating comprising:
 - applying a titanium nitride coating to said landing electrode.
9. The method of Claim 8, said applying an insulator layer comprising:

applying an oxide layer over said titanium nitride coating.

10. The method of Claim 8, said applying an insulator layer comprising:
applying an oxide layer over said titanium nitride coating using plasma deposition.
11. The method of Claim 8, said applying an insulator layer comprising:
growing a thermal oxide layer over said titanium nitride coating.
12. The method of Claim 9, said applying a lubrication layer comprising:
applying a halogenated acid layer to said oxide layer.
13. The method of Claim 9, said applying a lubrication layer comprising:
applying a perfluorodecanoic acid layer to said oxide layer.
14. The method of Claim 1, said applying an insulator layer comprising:
applying a metal layer over said antireflective layer; and
oxidizing said metal layer.
15. The method of Claim 1, said applying an insulator layer comprising:
applying a metal layer no thicker than 200Å over said antireflective layer; and
oxidizing said metal layer.
16. The method of Claim 1, said applying an insulator layer comprising:
applying a metal layer no thicker than 100Å over said antireflective layer; and
oxidizing said metal layer.
17. The method of Claim 1, said applying an insulator layer comprising:
applying an aluminum layer no thicker than 100Å over said antireflective layer; and
oxidizing said metal layer.
18. The method of Claim 1, said applying a lubrication layer comprising:
applying a halogenated acid layer to said insulator layer.

19. The method of Claim 1, said applying a lubrication layer comprising:
applying a perfluorodecanoic acid layer to said insulator layer.
20. A micromechanical device comprising: /
a substrate;
a reflective member supported on said substrate;
an antireflective coating supported on said reflective member;
an insulator layer supported on said antireflective coating; and
a lubrication layer supported on said insulator layer.
21. The micromechanical device of Claim 20, said substrate comprising:
a silicon substrate.
22. The micromechanical device of Claim 20, said reflective member comprising:
an aluminum alloy member supported on said substrate.
23. The micromechanical device of Claim 20, said reflective member comprising:
an aluminum alloy landing electrode supported on said substrate.
24. The micromechanical device of Claim 20, said antireflective coating comprising:
a titanium nitride coating supported on said substrate.
25. The micromechanical device of Claim 20, said insulator layer comprising:
an oxide layer supported on said substrate.
26. The micromechanical device of Claim 20, said insulator layer comprising:
an oxide layer plasma deposited on said substrate.
27. The micromechanical device of Claim 20, said insulator layer comprising:
an thermal oxide layer grown on said substrate.
28. The micromechanical device of Claim 20, said lubrication layer comprising:

a halogenated acid layer supported on said insulator layer.

29. The micromechanical device of Claim 20, said lubrication layer comprising:

a perfluorodecanoic acid layer supported on said insulator layer.

30. A system comprising:

a light source for providing a beam of light along a light path; and

a device on said light path, said device comprising:

a substrate;

a reflective layer;

an antireflective coating supported on said reflective layer;

an insulation layer supported on said antireflective coating; and

a lubrication layer on said insulation layer.

31. The system of Claim 30, said substrate comprising:

a silicon substrate.

32. The system of Claim 30, said reflective member comprising:

an aluminum alloy member supported on said substrate.

33. The system of Claim 30, said reflective member comprising:

an aluminum alloy landing electrode supported on said substrate.

34. The system of Claim 30, said antireflective coating comprising:

a titanium nitride coating supported on said substrate.

35. The system of Claim 30, said insulator layer comprising:

an oxide layer supported on said substrate.

36. The system of Claim 30, said insulator layer comprising:

an oxide layer plasma deposited on said substrate.

37. The system of Claim 30, said insulator layer comprising:
an thermal oxide layer grown on said substrate.
38. The system of Claim 30, said lubrication layer comprising:
a halogenated acid layer supported on said insulator layer.
39. The system of Claim 30, said lubrication layer comprising:
a perfluorodecanoic acid layer supported on said insulator layer.